WHAT IS CLAIMED IS:

1. A computer system comprising:

a first processing node configured to initiate a transaction by transmitting a request; and

a second processing node coupled to receive said request from said first processing node, wherein said second processing node is configured to generate a probe in response to said request, and wherein said probe includes an indication which designates a receiving node to receive responses to said probe, and wherein said second processing node is configured to generate said indication responsive to a type of said transaction.

2. The computer system as recited in claim 1 wherein said probe comprises a packet including a command field identifying said packet as said probe.

3. The computer system as recited in claim 2 wherein said indication is included within said command field.

4. The computer system as recited in claim 1 further comprising a third processing node coupled to receive said probe.

5. The computer system as recited in claim 4 wherein said third processing node is configured to determine if data corresponding to said request is stored within said third processing node.

6. The computer system as recited in claim 5 wherein said third processing node is

configured to generate a probe response responsive to determining if said data corresponding to said request is stored within said third processing node, and wherein said third processing node is configured to route said probe response responsive to said indication.

7. The computer system as recited in claim 1 wherein said receiving node comprises said second processing node if said type of said transaction is a write of less than a cache block of data.

8. The computer system as recited in claim 7 wherein said receiving node comprises said first processing node if said type of said transaction is other than said write of less than said cache block of data.

9. The computer system as recited in claim 8 wherein said probe comprises a first packet including a target node field identifying said second processing node and a source node field identifying said first processing node.

10. The computer system as recited in claim 9 wherein said probe response comprises a second packet including a response node field, and wherein said third processing node is configured to copy a value from said target node field of said first packet to said response node field if said type of said transaction is said write of less than said cache block of data.

11. The computer system as recited in claim 10 wherein said third processing node is configured to copy a value from said source node field of said first packet to said response node field if said type of said transaction is other than said write of less than said cache block of data.

12. The computer system as recited in claim 1 wherein said second processing node

comprises a memory controller configured to communicate with a memory in which said cache block is stored, and wherein said memory controller is configured to generate said probe upon selecting said request to access said memory.

13. A method for maintaining coherency in a computer system, the method comprising:

transmitting a request from a source node to a target node;

generating a probe in said target node responsive to said request;

designating a receiving node for responses to said probe via an indication within said probe; and

routing a probe response to said one or more probes to said receiving node.

14. The method as recited in claim 13 wherein said designating is responsive to a type of said transaction.

15. The method as recited in claim 13 wherein said designating comprises designating said target node if said type of said transaction is a write of less than a cache block of data.

16. The method as recited in claim 15 wherein said designating further comprises designating said source node if said type of said transaction is other than said write of less than said cache block of data.

17. The method as recited in claim 13 wherein said routing comprising indicating said receiving node in a response node field within a probe response packet.

18. The method as recited in claim 17 wherein said receiving node comprises said target node if said type of said transaction is a write of less than a cache block of data.

19. The method as recited in claim 18 wherein said receiving node comprises said source node if said type of said transaction is other than said write of less than said cache block of data.